

**WHAT IS CLAIMED IS:**

*SUB A* 1. A method of requesting frame retransmission in a mobile communication system, comprising the steps of:

5 storing a sequence numbers of a plurality of RLP (Radio Link Protocol) frames that are not received from a transmitter in a receiver;

transmitting a retransmission request frame including fields that indicate the sequence numbers from the receiver;

10 sequentially receiving the requested RLP frames in the order of the sequence numbers from the transmitter in the receiver; and

comparing the stored sequence numbers with the sequence numbers of received RLP frames when if the receiver fails to receive one of the requested RLP frames, requesting retransmission of the lost RLP frame upon receipt of an RLP frame of a higher sequence number than the sequence number of the lost RLP frame.

15 2. A mobile communication system comprising:

a transmitter for transmitting a plurality of RLP (Radio Link Protocol) frames each having a sequence number; and

a receiver for receiving the plurality of RLP frames,

20 wherein the receiver transmits a retransmission request frame including fields that indicate the sequence numbers of non-received RLP frames, the transmitter sequentially transmits the requested RLP frames along with the sequence numbers of the requested RLP frames in the order of the sequence numbers to the receiver upon receipt of the retransmission request frame, and if the receiver fails to receive one of the requested RLP frames, the receiver  
25 RLP transmits a retransmission request frame for the RLP frame the receiver failed to receive upon receipt of an RLP frame of a higher sequence number than the sequence number of the lost RLP frame.

3. A mobile communication system comprising:

30 a transmitter for transmitting a plurality of RLP (Radio Link Protocol) frames each having a sequence number, and sequentially transmitting to a receiver requested RLP frames

ed RLP  
ame; and  
ity of RL  
e the seq  
request fra

5